REMARKS

Claims 3 and 14 have been amended. Claims 19-22 have been added. Reexamination and reconsideration are respectfully requested.

In the Office Action, independent claims 1, 8, 11, 17 and 18 were rejected as obvious over SAKAMOTO et al. (US 6,396,229) in view of OKUNO et al. (US 5,726,549). Applicants respectfully traverse this rejection in view of the following remarks and the remarks submitted in the prior reply to the Office Action, the contents of which are incorporated by reference.

As recited in independent claims 1 and 8, Applicants' invention provides a controller for a mobile body that includes a rotor position estimator (for example 301 shown in Fig. 1) and a mobile body position estimator. The rotor position estimator estimates a magnetic pole position of a rotor of a synchronous motor that drives the mobile body based on electrical quantities in relation to electric power supplied to the synchronous motor. The mobile body position estimator estimates the position of the mobile body based on the magnetic pole position estimated by the rotor position estimator, for example 301.

Applicants' mobile body position estimator thus does not estimate the position of the mobile body directly, but rather estimates it based on the magnetic pole position, which itself was estimated by the rotor position estimator based on electrical quantities in relation to the electric power supplied to the synchronous motor. Neither SAKAMOTO nor OKUNO disclose or suggest such features, whether taken alone or in combination.

As the Examiner acknowledged in the Office Action, SAKAMOTO does not disclose controlling a mobile body via a mobile body position estimator (see page

3, lines 3-4). The Examiner goes on, however, to argue that OKUNO discloses a mobile body position estimator which estimates the position of a mobile body based on the magnetic pole position estimated by said rotor position estimator, citing to col. 1, lines 11-41 of OKUNO (see Office Action page 3, lines 5-8). Applicants respectfully submit this is not correct as OKUNO does not disclose a mobile body position estimator as recited in Applicants' claims.

In OKUNO et al., it is disclosed that a "rotor position" is determined by "phase voltages and phase currents" (col. 1, lines 11-18). This "rotor position" corresponds to the "magnetic pole position" of the rotor recited in Applicants' claim 1 with respect to the rotor position estimator. Clearly, this rotor position/magnetic pole position does not correspond to the "position of said mobile body" recited in Applicants' claims. Clearly, therefore, as with SAKAMOTO et al., OKUNO et al. likewise does not disclose a mobile body position estimator which estimates the position of said mobile body as in Applicants' claims.

As further proof of this fact, OKUNO describes in col. 1, lines 19-29 that "the magnetic pole positions in the motors are estimated...". No where does OKUNO disclose any estimation of a "mobile body position" as in Applicants' claimed invention.

Similarly, col. 1, lines 30-41 of OKUNO discloses that "the rotor position in the motor" can be estimated from the "monitored phase currents and the monitored phase voltages". Again, this estimated "rotor position" does not correspond to Applicants' estimation of the mobile body position, but merely to

Applicants' rotor position estimator which estimates the magnetic pole position of the rotor of the motor.

In view of the above, it should be clear that neither SAKAMOTO nor OKUNO disclose or suggest a mobile body position estimator which estimates the position of the mobile body based upon the magnetic pole position estimated by the rotor position estimator. Hence, Applicants submit each of independent claims 1, 8, 11, 17 and 18 are patentable over this combination. The remaining claims depend from these claims and are also submitted to be patentable.

Regarding the clarifying amendments made to claims 3 and 14, support is provided in the specification on page 6, lines 21-24. These amendments merely clarified that information on the position of the mobile body is displayed by the mobile body position indicator. Lastly, Applicants added claims 19-22 specifying the mobile body being an elevator car. Support is provided in the specification, for example, at page 11, lines 2-19.

For the foregoing reasons, Applicants submit claims 1-22 are in condition for allowance. An early notice to that effect is solicited.

Summarizing, Applicants have made an important contribution to the art to which the present subject matter pertains, for which no counterpart is shown in any of the art or combination of same. The invention is fully set forth and carefully delimited in all claims in this case. Under the patent statute, Applicants should not be deprived of the protection to which they are entitled for this contribution. Accordingly, it is respectfully requested that favorable reconsideration and an early notice of allowance be provided for all remaining claims.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #381NP/50449).

Respectfully submitted,

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